

REPORT
OF THE
BOTANICAL AND FORESTRY
DEPARTMENT
FOR THE YEAR
1928



HONG KONG 1929
PRINTED BY NORONHA & CO.
GOVERNMENT PRINTERS

HONG KONG.

REPORT ON THE BOTANICAL AND FORESTRY DEPARTMENT FOR THE YEAR 1928.

GENERAL REMARKS.

The weather throughout the whole year was very favourable for both gardening and forestry operations, the fourth quarter was exceptionally dry and sunny and winter-flowering shrubs, trees and annuals were much better than during the past few years.

Typhoon signals were hoisted on only two occasions during the year and no damage was done to either plantations or roadside trees by gales which usually destroy large numbers of young trees during the latter part of the year.

The rainfall for the year was 80.89 inches in 138 days as against 120.12 inches on 176 days in 1927.

GARDENS, PARKS AND GROUNDS.

Botanic Gardens.—A granite memorial in the shape of a Pai Lau was erected at the top of the main entrance steps in the Old Garden by the Imperial War Graves Commission in memory of the Chinese in the service of the British Government who died through enemy action during the Great War 1914-1918.

Two rockeries were removed to make room for the memorial.

A very large specimen of Banian (*Ficus retusa*) adjoining the Azalea terraces, which was one of the oldest trees in the gardens, died and was removed.

Grass Caterpillars (*Thialleta signifera*) made their appearance on lawns during the autumn; they were destroyed by dressings of diluted Jeyes Fluid, the dressings are most effective when applied at night.

The outhouses in the nursery yard were accidentally destroyed by fire on October 11th; prompt action by the clerical staff prevented the fire from spreading to the office.

A portion of the aviary was repaired by the Public Works Department and all woodwork in one section was replaced by concrete.

Three concerts were given on the lower terrace of the Old Garden during the year by the Band of the King's Own Scottish Borderers.

The total number of trees, shrubs and plants sold during the year was 1,886.

Government House Grounds.—A number of *Chrysalidocarpus lutescens* were planted to form a screen on the east side of the guard house.

Tennis lawns were regularly watered during the dry season and were further given such attention as they required, grass banks were regularly cleared of undergrowth.

The whole of the interior of the house was decorated on June 4th the occasion of the Birthday of His Majesty the King, portions of the house were decorated on several other occasions during the year.

Mountain Lodge Grounds.—A number of young trees of *Cupressus macrocarpa*, *Cunninghamia sinensis* and *Casuarina equisetifolia* were planted in various portions of the grounds to replace those destroyed by the gale during the previous year.

Lawns were given such attention as they required and the valley was cleared of undesirable undergrowth.

Colonial Cemetery.—A number of *Chrysalidocarpus lutescens* were planted as a screen near the caretakers' quarters.

The grass plots on either side of the central walk were planted with a row of *Phoenix Roebelinii*.

A number of tress overgrowing and likely to cause damage to headstones were removed.

All grass plots and banks were given such attention as they required.

Kowloon Hospital Grounds.—The extensive grounds of this hospital were taken over by this Department in January.

The major portion of the grounds was laid out as lawns and grass slopes, and in suitable areas flowering shrubs and Palms were planted; owing to the force of the wind which blows across the grounds during the greater part of the year the flowering shrubs have not grown well.

Bamboo hedges were planted to act as screen between the various blocks of quarters.

A row of shade trees (*Aleurites triloba*) was planted by the side of the main approach road.

Children's Playground, Queen's Gardens.—The lawn at the west end of Queen's Gardens was taken over by this Department in January and maintained as a playground for use of children of occupiers of the adjoining Government Quarters.

Blake Garden, West End Park, King's Park, Civil Hospital, Lunatic Asylum, Senior Officers' Quarters, Leighton Hill, Indian School, Volunteer Headquarters, Statue Square Plots, Victoria Hospital, Homestead Quarters, Government Pavilions and Villas, Royal Observatory and Kowloon Magistracy. The grounds or such portions of them as are under the control of this Department were kept in order during the year, additional planting of trees was carried on, grass lawns, banks, trees and shrubs were given such attention as they required.

Statue Pier.—The pier was decorated with pot plants several times during the year on the occasions of the landing of persons paying official visits to the Colony.

The Eyrie.—The grounds were maintained by this Department up to July 5th when it was handed over to the Public Works Department.

HERBARIUM AND LIBRARY.

Since the treating of the interior of the building with Hydrocyanic Gas by the Government Analyst in June 1927 no live insects have been found among the books and plant specimens.

Plant specimens of botanical interest and economic value were identified for local collectors and collectors outside the Colony, dried plant specimens were supplied to various institutions outside the Colony.

Facilities for study were afforded to visiting botanists who passed through the Colony, from time to time.

FORESTRY.

Formation of Pine Tree Plantations.—The number of *in situ* sowings of seed of *Pinus Massoniana* amounted to 196,000 during the year, the areas which were reafforested by this method were Mount Collison, West Bay, Stanley Catchwater, Pokfulam Valley, Kowloon Bay, Castle Peak, Shek Li Pui Reservoir area, Kowloon Tsai, Taipo Forestry Reserve and Ping Shan.

On suitable areas a total of 1,666 pounds of *Pinus Massoniana* and 155 pounds of *Leucaena glauca* were sown by the broadcast method.

Broad-leaved Trees Planted.—Groups of the following trees were planted in the most suitable areas in the Colony, the major portion of such work being carried out in Taipo Forestry Reserve and Mount Collison Prohibited Area:—*Acacia confusa*, *Acacia*

pennata, *Bischofia javanica*, *Leucaena glauca*, *Spondias lutea*, *Sapium sebiferum*, *Aleurites Fordii*, *Erythrina Crista-galli*, *Gleditschia australis* and *Adenanthera intermedia*.

Miscellaneous Planting.—The planting of trees on roadsides and vacant plots to replace those killed by the severe gales of 1927 was carried on up to the end of the year.

On banks which are not allocated as playing fields in King's Park 203 mixed flowering trees and shrubs and 760 creepers were planted, serious damage was done to trees, shrubs and creepers by goats which are from time to time grazed in the Park.

On the low hills adjoining Fan Ling golf course 500 mixed trees were planted.

The open space adjoining Taipo Market was planted with Banian cuttings, all were doing well at the end of the year.

Trees Felled.—In connection with traffic requirements large shade trees were removed from the following areas:—Canton Road, Kowloon, adjoining Naval Hospital, Queen's Road East, Wood Road, Wanchai, Nathan Road, Kowloon.

Fellings of Pine and wild trees were carried out in areas damaged by fire and in connection with the development of building sites and extension of roads.

Undergrowth Clearing.—The total area cleared in connection with anti-malarial measures amounted to 5,310,345 square feet, for other purposes such as cutting of traces for surveys, nullah training, road making and other public improvements the areas cleared amounted to 1,083,225 square feet.

Insect Pests.—Pine Tree Caterpillars (*Dendrolimus punctatus*) made their appearance in large numbers during the early months of the year in many parts of the Colony, the usual method of destruction by collection and burying was carried out and a total amount so dealt with amounted to 14,505 pounds.

Protection of Plantations.—All fire barriers were cleared before the commencement of the dry season, in Taipo Forestry Reserve a new section of barrier three miles in length was made, at Mount Collinson Prohibited Area the barrier undoubtedly saved the majority of the young trees in the area from total destruction.

During the year 68 fires occurred, no very serious damage was done to Pine plantations, the majority of the fires appeared to be caused by the careless dropping of lighted matches or tobacco; one man was apprehended at Wanchai Gap on February 17th in the act of deliberately setting fire to grass and young trees, he was subsequently convicted and imprisoned.

Twenty-five of the fires occurred on the days of the Ching Ming and Chung Yeung Festivals, eleven of this number commenced in cemeteries and were due to careless handling of fire-crackers or sacrificial papers.

During the driest seasons of the year a continuous watch was maintained for plantation and grass fires, a senior forester was on duty at the office telephones on all holidays and Sundays, and by this means a lorry and foresters could be sent out to the scene of the fires within a few minutes of a telephone report being received.

Mount Collinson Prohibited Area.—The prohibition of entry to this area in order to prevent damage to the trees contained in it has so far been successful and has undoubtedly saved large numbers of trees from being destroyed by theft and fire, there were no prosecutions in respect of unauthorised persons entering the area and the only damage during the whole year was a very small amount of grass-cutting and one case of petty damage to the iron notices.

Forest Guards Service.—The total number of persons arrested and charged with forestry offences during the year was 281 as against 355 in the preceding year, of these 248 were fined or imprisoned, 25 cautioned, 6 were discharged and 2 bound over.

Full particulars of these cases are given in Tables I and II.

Seven persons who were convicted of a second and in some cases of a third or fourth forestry offence were banished during the year, during 1927 fifteen persons were banished for similar offences, the absence of these persons from the Colony has undoubtedly had the effect of preserving many valuable trees which were constantly being felled and sold as firewood.

Two contractors paid compensation for damage to trees in plantations, the first the sum of \$50 in respect of damage caused by unauthorised removal of earth, the second \$100 in respect of damage caused by careless removal of boulders.

The notices which are posted in all parts of the Colony prior to the Chinese New Year appear to be bringing about the desired effect of lessening the heavy damage to the Chinese New Year Flower (*Enkianthus quinqueflorus*), damage to this beautiful flowering shrub was much less than during the past several years.

Forest Service Paths.—The extension of the path, which will eventually give access to all parts of Taipo Forestry Reserve was in progress at the end of the year, all old paths were given such attention as they required.

Forestry Licences, New Territories.—Fees collected during the year amounted to \$3,734.92 as against \$4,099.70 in 1927.

AGRICULTURE ETC.

The New Territories Agricultural Show, which was held for the first time in December 1927, was not repeated during 1928 as it was found that better results could be obtained by holding the show early in January in the following year.

The cultivation of foreign vegetables is still on the increase in many parts of the Colony.

Inspection of Nursery Stock and Vegetable Products.—Thirteen consignments totalling 17,340 bulbs of *Narcissus Tazetta* were inspected and passed for export to the United States of America and Honolulu, six consignments totalling 195,960 bulbs were inspected and passed for export to Britain and British Colonies.

Ninety-eight consignments of dried and fresh vegetable products were inspected and passed for export to the Philippine Islands.

SEED COLLECTION.

Seeds of the following were collected for local use and for the purpose of exchange:—*Callistemon lanceolata*, *Ficus retusa*, *Sterculia lanceolata*, *Tristania conferta*, *Cassia fistula*, *Bauhinia variegata*, *Leucaena glauca*, *Glyptostrobilus heterophyllus*, *Acacia pennata*, *Cunninghamia sinensis*, *Casuarina equisetifolia*, *Pinus Massoniana*, *Aleurites triloba*, *Aleurites Fordii*, *Aleurites montana*, *Poinciana regia*, *Cinnamomum Camphora*, *Callistemon rigidus*, *Melia Azedarach*, *Garcinia oblongifolia*, *Atalantia Hindsii*, *Bischofia javanica*, *Ardisia crispa*, *Celtis sinensis*, *Albizia Lebbek*, *Melaleuca Leucadendron*, *Eucalyptus tereticornis*, *Strychnos angustifolia* and *Liquidambar chinensis*.

EXCHANGE OF SEEDS, &C.

The Department is indebted to the following donors of seeds, plants &c.:—Curator, Lloyd Botanic Garden, Darjeeling, India; Director, Department of Agriculture, Ceylon; Registrar, University of Hong Kong; The Director, R. H. S. Gardens, Surrey; Director of Forestry, Manila; Rev. R. H. Wells; Professor Juan Balme, Mexico; Mow Fong Garden and Messrs. Hsen-Hsu Hu; Woon Yung Chun; H. H. Seth; S. C. Le Tickle; P. J. Wester (Manila); H. Humphreys; W. Dixon (Sydney) and A. Kol (Leningrad, U.S.S.R.).

The following were the principal recipients:—Director, Daghestan Agricultural Plant-Breeding Station, Caucasus; Departments of Agriculture, Bermuda; Ceylon; Java; Assistant Inspector, Department of Agriculture, Vancouver, B. C.; Curator, Lloyd Botanic Garden, Darjeeling, India; Subadar Tota Ram, 4th Punjabi Regiment, India; General Li Fuk Lam; Father E. Teruzzi, Catholic Mission; Elders, Chung Pak Long,

(N.T.); Mow Fong Garden and Messrs. Tang Pak Kau (N.T.); P. J. Wester (Manila); H. Humphreys; Chan Kwai (N.T.); H. Campbell (Cyprus); H. D. McLaren; John Williams Son and Sharp (England) and Messrs. Sanders (England).

REVENUE AND EXPENDITURE.

Statements of the Revenue collected by the Department and comparison of Revenue and Expenditure are given in Tables III and IV.

STAFF.

The Superintendent proceeded on leaves on March 31st and returned and resumed duty on November 23rd.

The Assistant Superintendent returned from leave and resumed duty on February 3rd and was in charge of the Department during the Superintendent's absence.

Foreman Forester Wong Sin retired on pension on August 31st after nineteen years service.

H. GREEN,
Superintendent.

15th March, 1929.

Table I.
FOREST GUARDS SERVICE OFFENCE

Village or District.	Block	Compartment.	REPORT OF:—																
			Pine tree stealing.	Pine tree branch stealing.	Pine tree needle stealing.	Pine cone stealing.	Barking pine tree.	Brushwood stealing.	Grass cutting.	Bamboo stealing.	Fern stealing.	Wild flower stealing.	Tree root stealing.	Turf lifting.	Cattle grazing in plantation.	Seed stealing.	Trespassing upon plantation.	Setting fire on plantation.	Assault on Forest Guard.
Victoria	1	A.C.D.G.	—	1	—	—	—	6	—	—	—	6	—	—	—	—	6	1	—
Wongneichung .	2	A.B.C.D.	2	—	—	—	—	3	—	—	—	1	2	—	—	—	5	—	—
Shaukiwan	3	A.B.C.D.E.F.	4	1	—	—	—	13	—	—	—	1	—	—	—	—	14	—	—
Tytam	4	A.C.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	4	—	—
Stanley	5	A.	4	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	—
Aberdeen	6	A.B.F.	4	1	—	—	—	22	—	—	—	1	—	—	—	—	9	—	—
Pokfulam	7	B.D.E.G.	8	4	—	—	—	4	—	—	—	—	—	—	—	—	4	—	—
Kowloon	8	B.	2	—	—	—	—	2	—	—	—	1	—	—	—	—	1	—	—
Harbour Belt* ..	9	A.B.C.D.	17	4	—	1	—	13	—	—	—	—	—	—	3	—	48	—	—
Cheungshawan ..	10	—	4	1	—	—	—	3	—	—	—	—	—	—	—	—	—	—	—
Kang Hau	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
New Territories.	12	—	1	4	—	—	—	31	4	—	—	—	—	—	—	—	4	2	—
Total for 1928			47	16	—	1	—	97	4	—	—	10	2	—	3	—	98	3	—
Total for 1927			76	20	15	—	2	85	8	2	2	1	1	8	5	2	118	—	10

One man was arrested for damage to plantation by digging and removing blacksoil. \$50 compensation paid, man not charged.

Table II.

POLICE COURT RESULTS.

<i>Case.</i>	1928	1927
\$1 to \$2 fine	22	30
\$2.50 „ \$3 „	10	3
\$4 „ \$5 „	20	27
\$6 „ \$10 „	63	37
\$11 „ \$15 „	7	15
\$16 „ \$20 „	—	16
\$21 „ \$25 „	6	19
\$30 „ \$35 „	2	3
\$50 „ „	1	5
1 to 4 days' imprisonment	—	2
5 „ 7 „ „	23	19
8 „ 14 „ „	53	54
3 weeks' „	29	35
4 „ „	2	12
6 „ „	4	15
1 month's „	3	6
2 months' „	1	—
6 months' „	1	2
Discharges	6	10
Cautions	25	26
Forfeiture of Bail	—	10
Personal Bond	2	6
Detained for 24 hours	1	—
Withdrawn	—	3
Total	281	355

Table III.

REVENUE.

Revenue.	1928	1927
	\$	\$
Timber Sales	3,084.32	2,382.15
Plant Sales	724.20	708.24
Loan of Plants	216.36	271.32
Forestry Licences	3,734.92	4,099.70
Sale of Condemned Stores	15.65	12.31
Other Miscellaneous Receipts....	1,044.37	256.33
Interest on Current Account...	29.53	28.05
Fine Fund		103.66
Total	8,849.35	7,861.76

Including \$985 for Inspection of Nursery Stock.

Table IV.

Comparative Statement of Revenue and Expenditure for the Years 1919-1928.

Year	Total Expenditure.	Total Revenue.	% of Revenue to Expenditure.
	\$	\$	
1919	51,457.65	8,307.77	16.16
1920	55,975.49	8,547.76	15.27
1921	61,428.11	10,657.86	17.35
1922	71,223.47	12,464.32	17.50
1923	77,157.40	15,848.76	20.54
1924	86,516.80	13,038.79	15.07
1925	96,371.63	9,806.95	10.18
1926	87,642.19	10,798.95	12.32
1927	93,289.09	7,861.76	8.43
1928	96,597.70	8,849.35	9.16

